

REMARKS

The claims have been amended to better define the claimed invention and better distinguish the claimed invention from the prior art. More particularly, claims 7-9 have been canceled, and independent claim 1 has been amended to specify that the operational transconductance circuit comprises an operational transconductance amplifier for inputting/outputting currents in proportion with a voltage difference between the detected voltage and the first reference voltage. Dependent claims 3-6 have been amended to conform to claim 1, as amended. No new matter has been entered.

Considering first the rejection of claims 1-9 as being anticipated by Andoh et al., as noted *supra*, claims 7-9 have been canceled, thus rendering moot the rejection of those claims as anticipated by Andoh et al.

As to the remaining claims, in the rejection, the Examiner takes the position that Andoh et al. Fig. 9 transistors 56, 57 can be read as a detection circuit of the present invention, and circuit 38 in Figs. 8 and 9 can be read as an operational transconductance circuit of the present invention. But transistors 56, 57, 58 and 59 in Fig. 9 are the same circuit as the quadritail circuit disclosed in Fig. 3 of US Patent No. 5,381,113 by the same inventor of the present invention, Katsuji Kimura (copy enclosed as Exhibit A for the convenience of the Examiner). Input-output characteristics of the quadritail circuit are shown in Fig. 4 of US Patent No. 5,381,113, and comprise good square-law characteristics (See column 7, lines 9-15 of US Patent No. 5,381,113). Therefore, Andoh et al. does not disclose a detection circuit and an operational transconductance amplifier as required by claim 1 or any of the claims dependent thereon.

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Turning to the rejection of claims 1-4, 6, 7 and 9, as anticipated by Brenden, as noted *supra*, claims 7 and 9 have been canceled. As to the remaining claims, the Examiner takes the position that circuit CMFN46 in Brenden Figs. 2 and 4 can be read as an operational transconductance circuit of the present invention. But output signal of CMFN46 only connects to gates of M1 and M2 (See Fig. 4). Therefore CMFN46 is not inputting/outputting currents in proportion with input voltages as required by Applicant's claim 1. Therefore, Brenden only discloses prior art corresponding to admitted prior art in Fig. 1 of the present invention. Thus the rejection of claim 1 and several claims dependent thereon as anticipated by Brenden also is in error.

Turning to the rejection of claims 5 and 8 as being unpatentable over Brenden, as noted *supra*, claim 8 has been canceled. As to claim 5, claim 5 is dependent on claim 1. The deficiencies of Brenden vis à vis claim 1 are discussed above. However, the more basic and essential features of claim 5, namely, the requirement that the operational transconductance amplifier is inputting/outputting currents in proportion with a voltage difference between the detected voltage and the first reference voltage is neither disclosed nor suggested by Brenden. Accordingly, claim 5 also is patentable over Brenden.

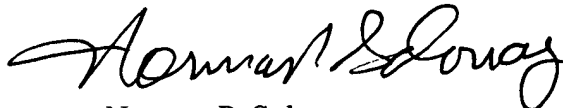
Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

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Respectfully submitted,



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